#### Welcome Students!!

I hope you are as excited to participate in the class as I am to teach it. It's going to fly by fast and it's going to be a pretty intense experience. I try to come up with creative, fun, and interactive lessons to keep everyone on your toes so be prepared. I'm teaching this class as I would to college students so come to class prepared with your homework completed and the reading assignments finished. I have assigned a book (Building Java Programs: A Back to Basics Approach (2nd Edition) by Stuart Reges and Marty Stepp) and you will have nightly reading with questions from the book to answer for homework.

I'm always available to answer questions and I will also have three of my best former students as my Teaching Assistants ready to assist with any bugs you have (what's a computer bug?). Also,

- The classroom is located at 1111 Etcheverry and we will be using Window machines.
- July 4<sup>th</sup> is a holiday so the makeup class is on July 5<sup>th</sup> at the same time & room

James Brotsos

# Preparation for the class

### Get an email account

If you don't have an email account, get one immediately.

Also, the best way to get a hold of me is through Google Hangouts so try to add me on your list: jayme.brotsos@gmail.com

## Learn about GIT

I will be posting files, programs, slides, and notes in my github repository.

- 1. Create a user account here: http://github.com/
- 2. Install GIT here: http://git-scm.com/downloads
- 3. Watch some videos here: <a href="http://git-scm.com/videos">http://git-scm.com/videos</a>
- 4. Clone my repo: <a href="https://github.com/jbrotsos/ATDP.git">https://github.com/jbrotsos/ATDP.git</a>
- 5. Email me what the README file says inside your cloned directory

# **Get familiar with Eclipse**

Eclipse is the IDE (google what IDE stands for) that I will be using and assigning labs in. Install it at home first and try to create a new java project with a java file (what is the extension for a java file?).

Installation can be found here:

https://eclipse.org/

Watch some videos on youtube to help you see how a programmer uses it.

# **Understand what compiling does**

When you "compile" a java program, it converts a java text file into a java object file. After it's compiled into an object file, you can run it as a java program.

- Google "compiler"
- Google "object file"
- How do you compile and run a program in Eclipse?

# Learn about Raspberry PI

Raspberry PIs are basically mini computers. I will be demoing programs on the Raspberry PI throughout the class. Also, we will run games that you create onto the PI as well.

Research, define and describe the following components that are found on a Raspberry PI:

- Ethernet
- HDMI
- USB
- GPIO
- SD CARD
- CPU
- SoC

Try to understand what these components do in a computer and just not the boring Wikipedia answer of what they are.

